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removed keeps enough mechanical destructive strength as a backing substrate, it is not necessary to add a reinforced substrate as is added in the first application. The above-mentioned APD includes minimum materials which do not function electrically at the both sides, the cathode electrode 92 and the anode electrode 91. Therefore it is possible to improve detecting efficiency more if a lot of APD are stacked and then used for detecting. Although hidden from the view, to provide the anode electrode on the surface of the cathode electrode as shown in FIG. 4(a) and to provide the window at the anode electrode as shown in FIG. 9(b) in this application are both useful. The semiconductor substrate 492 which is the backing substrate portion of FIG. 9(c) is not an incident region of an incident light such as an x-ray to be detected, however it, can be a scattering region where an incident ray coming into the backing substrate portion is scattered. Furthermore, though hidden from the view, when the semiconductor substrate 492 in a SOI substrate is made of a quartz substrate in this application, which means that the semiconductor substrate 492 is quartz, the semiconductor substrate 492 never functions as the scattering region.

Detailed Description Text - DETX (39):

FIG. 17 is a schematic cross section showing a photodiode array which is a semiconductor integrated circuit device of an

*Also has grooves + windows
See FIG. 9*